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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,399	11/14/2003	Kevin M. Moore	1533.3500003	6849

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Craig G. Cochenour
Buchanan Ingersoll, P.C.
301 Grant Street
20th Floor
Pittsburgh, PA 15219

EXAMINER	
OH, TAYLOR V	
ART UNIT	**PAPER NUMBER**
1625	

MAIL DATE	DELIVERY MODE
12/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/712,399	MOORE ET AL.	
	Examiner	Art Unit	
	Taylor Victor Oh	1625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 November 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,5-10,13-61,63,65 and 66* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,5-10,13-61,63,65 and 66* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Applicant's arguments with respect to claims 1-2, 5-10, 13-61,63, and 65-66 have been considered but are moot in view of the new ground(s) of rejection.

The Status of Claims

Claims 1-2, 5-10, 13-61,63, and 65-66 are pending.

Claims 1-2, 5-10, 13-61,63, and 65-66 are rejected.

DETAILED ACTION

Priority

1. It is noted that this application is a CIP of 09/955,672 filed on 09/19/2001(US 6,849,748), which claims benefit of 60/244,962 (11/01/2000).

Drawings

2. The drawing filed on 11/14/03 is accepted by the examiner .

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-2, 5-10, 13-61,63, and 65-66 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-61 of U.S. Patent No. 6,849,748. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant invention and the claims 1-61 of U.S. Patent No. 6,849,748 are in a genus and species relationship.

The instant claim 1 is described below:

> 1. (Previously Presented) A process for producing an anhydrosugar alcohol comprising: (a) heating a pentitol or hexitol sugar alcohol or monoanhydrosugar alcohol starting material until molten; (b) dehydrating said molten starting material in the presence of a solid acid catalyst selected from at least one member of the group consisting of an acidic ion exchange resin and an acidic zeolite powder and without a solvent to form an anhydrosugar alcohol mixture; and (c) purifying said anhydrosugar alcohol from said anhydrosugar alcohol mixture, wherein said purification comprises distillation of said anhydrosugar alcohol mixture in a first film evaporator.

Whereas the claim 1of U.S. Patent No. 6,849,748 is described below:

1. A process for the purification of an anhydrosugar alcohol, without using organic solvents, the process comprising:

heating a pentite or hexite sugar alcohol or monoanhydrosugar alcohol starting material, with stirring and without solvents until molten;

dehydrating the starting material, under vacuum and while maintaining heat and stirring, in the presence of a solid acid catalyst and without solvents to produce a dehydrated anhydrosugar alcohol mixture; and

purifying the anhydrosugar alcohol without solvents.

However, the instant invention differs from the U.S. Patent No. 6,849,748 in that the claimed purification is involved in the narrowed distillation process in the film evaporator.

Even so, the U.S. Patent No. 6,849,748 does describe the distillation as shown in claims 7-8,which includes the distillation of the anhydrosugar alcohol mixture in the film evaporator. Furthermore, they are in the genus and species relationship. Therefore, it would have been obvious to the skilled artisan in the art to be motivated to narrow the claimed limitation in order to protect the narrow scope of the claimed invention since such a practice is within the purview of the skilled artisan in the art.

Claims 1-2, 5-10, 13-61,63, and 65-66 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 11/716,277. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant invention and the claims 1-61 of U.S. Patent No. 6,849,748 are in a genus and species relationship.

The instant claim 1 is described below:

1. (Previously Presented) A process for producing an anhydrosugar alcohol comprising: (a) heating a pentitol or hexitol sugar alcohol or monoanhydrosugar alcohol starting material until molten; (b) dehydrating said molten starting material in the presence of a solid acid catalyst selected from at least one member of the group consisting of an acidic ion exchange resin and an acidic zeolite powder and without a solvent to form an anhydrosugar alcohol mixture; and (c) purifying said anhydrosugar alcohol from said anhydrosugar alcohol mixture, wherein said purification comprises distillation of said anhydrosugar alcohol mixture in a first film evaporator.

Whereas the claim 1 of copending Application No. 11/716,277 is described below:

1. A process for the production of an anhydrosugar alcohol, comprising:

(a) mixing a pentitol or hexitol sugar alcohol or monoanhydrosugar alcohol starting material with a solvent to form a starting material solution, and, optionally, stirring said starting material solution;

(b) heating said starting material solution;

(c) pressurizing said starting material solution; and

(d) forming an anhydrosugar alcohol.

However, the instant invention differs from the copending Application No. 11/716,277 in that the claimed process is conducted without a solvent and its purification is unspecified.

Even so, the specification of the co-pending application (see page 3 , paragraph 0011) and (see page 3 , paragraph 0019) does describe that the claimed process is

conducted with or without a solvent; further the purification is involved in the distillation process. Furthermore, they are in the genus and species relationship. Therefore, it would have been obvious to the skilled artisan in the art to be motivated to narrow the claimed limitation in order to protect the narrow scope of the claimed invention since such a practice is within the purview of the skilled artisan in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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TAYLOR VICTOR OH
PRIMARY EXAMINER
12/9/07